

B7 activity was not further enhanced when RANKL and CD40L were used in combination, possibly due to DC functional capacity having reached a maximal level with either cytokine alone. Neither RANKL nor CD40L enhanced the *in vitro* growth of DC over the three day culture period. Unlike CD40L, RANKL did not significantly increase the levels of HLA-DR expression nor the expression of CD80 or CD86. --

At pages 35-36, please delete in its entirety the paragraph at page 35, line 34 to page 36, line 2, which begins with "Comparison of the nucleotide sequence..." and substitute the following paragraph:

B8 -- Comparison of the nucleotide sequence of murine and human RANK indicated that there were several conserved regions that could be important for TRAF binding. Accordingly, a PCR-based technique was developed to facilitate preparation of various C-terminal truncations that would retain the conserved regions. PCR primers were designed to introduce a stop codon and restriction enzyme site at selected points, yielding the truncations described in Table 2 below. Sequencing confirmed that no undesired mutations had been introduced in the constructs. --

In the Drawings:

Please cancel Figure 2. /

In Figure 3, please delete the caption "Figure 3" and substitute therefor --Figure 2--. /

In the Claims:

Please enter the following new claims into the application:

B9 -- 68. (New) An isolated or recombinant nucleic acid encoding a RANKL polypeptide selected from the group consisting of:

- c a) ~~the~~ a natural sequence RANKL of SEQ ID NO:11; and
c b) a fusion protein comprising ~~the~~ RANKL sequence of SEQ ID NO:11

wherein said RANK-L polypeptide is from a mammal.

69. (New) A cell comprising said recombinant nucleic acid of claim 68.

70. (New) The cell of claim 69, wherein said cell is:

- a) a prokaryotic cell;
- b) a eukaryotic cell;
- c) a bacterial cell;
- d) a yeast cell;
- e) an insect cell;

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- f) a mammalian cell;
 - g) a mouse cell; or
 - h) a human cell.

71. (New) A kit comprising said nucleic acid of claim 68.

72. (New) A nucleic acid which selectively hybridizes under conditions of 50°C in 5 x SSC to SEQ ID NO:10.

73. (New) A nucleic acid which selectively hybridizes under conditions of 63°C in 6 x SSC to SEQ ID NO:10.

74. (New) The nucleic acid of claim 73, wherein the wash conditions are 55°C in 3 x SSC.

75. (New) An isolated or recombinant nucleic acid according to claim 68, wherein said RANKL polypeptide is a RANK-L immunogen.

76. (New) An isolated or recombinant nucleic acid according to claim 68, which exhibits 100% identity over the protein coding portion of a ~~natural~~ DNA encoding ^{said} ~~a natural~~ RANKL sequence.

77. (New) A vector comprising a nucleic acid according to claim 68 and;
- a) transcriptional regulatory sequences operably linked to said RANK-L coding sequence; or
 - b) an origin of replication.

78. (New) An isolated or recombinant nucleic acid according to claim 68, wherein said nucleic acid:

- a) is from a natural source;
- b) comprises a detectable label;
- c) comprises synthetic nucleotide sequence; or
- d) comprises ^a ~~natural~~ full length coding sequence.

79. (New) An isolated or recombinant nucleic acid comprising a fragment from 17 to 30 nucleotides of a nucleic acid according to claim ~~68~~ ⁶⁸, which is a hybridization probe.

80. (New) A cell comprising said nucleic acid of claim 75.

81. (New) A cell comprising said nucleic acid of claim 76.

82. (New) A cell comprising said vector of claim 77.

83. (New) A cell comprising said nucleic acid of claim 78.

84. (New) A kit comprising a nucleic acid of claim 78.

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85. (New) A kit comprising said nucleic acid of claim 79.

86. (New) A method of making a protein, comprising culturing said cell of claim 69 in an environment resulting in expressing said protein and recovering said protein.

87. (New) A method of making a protein, comprising culturing said cell of claim 80 in an environment resulting in expressing said protein and recovering said protein.

88. (New) A method of making a protein, comprising culturing said cell of claim 82 in an environment resulting in expressing said protein and recovering said protein.

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89. (New) A method of making a ^{double-stranded} ~~duplex~~ nucleic acid comprising contacting said nucleic acid of claim 75 with a complementary nucleic acid under selective hybridization conditions at least as stringent as the conditions of hybridizing at 50°C in 5 x SSC, thereby forming said ^{double-stranded nucleic acid} ~~duplex~~.

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90. (New) A method of making a nucleic acid of claim 68, comprising amplifying said nucleic acid using PCR amplification methods. --

REMARKS

Claims 36-90 are now pending in the application. In an Office Action dated December 18, 2001, claims 36, 38-40, 42-44, 46-48, 50-52, 54-56, 58-60, 62-64, 66 and 67 have been allowed and claims 37, 41, 45, 49, 53, 57, 61 and 65 have been rejected as discussed below. New claims 68-90 have been entered into the application as indicated above.

The specification has been further amended to cancel Figure 2. The results that were illustrated in cancelled Figure 2 are fully described in Example 13 of the specification, thus cancellation of this figure does not constitute new matter.

To accommodate the cancellation of Figure 2, the specification has been amended in several places as indicated above to delete the description of this figure and all references to it in the body of the specification. In addition, the caption of Figure 3 has been amended to read "Figure 2." A substitute version of this latter figure with the corrected caption is submitted herewith and its entry into the application is requested.

The specification at page 25 was amended to update the address of the ATCC. This amendment does not constitute the addition of new matter to the specification.